



FIXED INCOME UPDATE – SECOND QUARTER 2018

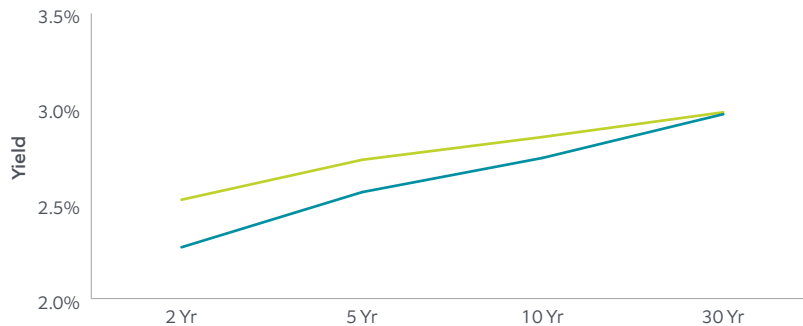
KEY POINTS

- U.S. economic data was firm, while Europe and China recovered modestly from recent weakness.
- The rising dollar, trade conflicts and political tensions abroad added to stress in overseas markets, while also increasing concerns over the trajectory of future domestic growth.
- Front-end Treasury yields rose and the interest rate curve flattened as the Federal Reserve became more confident in its forecasts.

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CHANGE IN TREASURY YIELDS – SECOND QUARTER



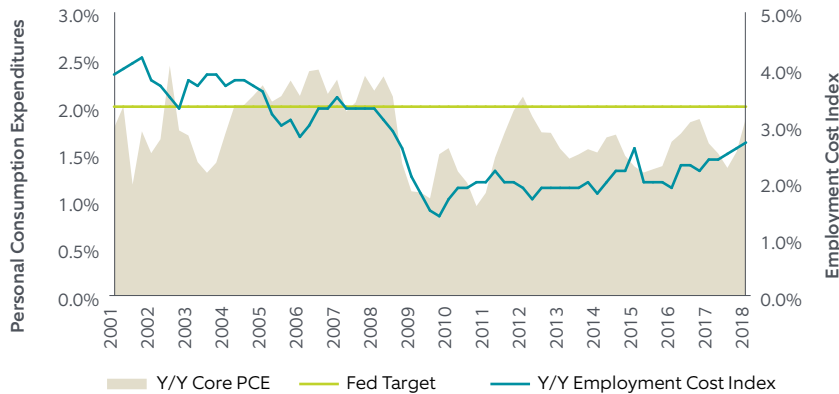
3/31/2018	2.27%	2.56%	2.74%	2.97%
6/30/2018	2.52%	2.73%	2.85%	2.98%
Change	0.25%	0.17%	0.11%	0.01%

SOURCE: Northern Trust Fixed Income; U.S. Department of the Treasury

MACRO

- Economic growth in the U.S. has improved, but some investors are skeptical growth can persist against a backdrop of higher interest rates.
- U.S. core PCE (Personal Consumption Expenditures), the Federal Reserve’s preferred measure of inflation, hit the Fed’s 2% target for the first time in six years. While inflation has risen, wage growth remains muted.

INFLATION & LABOR COSTS



SOURCE: Northern Trust Fixed Income; Bloomberg

CENTRAL BANK

- The Fed removed its forward guidance language and increased its target range by 25 basis points. However, it elected to raise interest rates on excess reserves by only 20 basis points. This was noteworthy as investors assess the Fed’s ability to maintain the effective fed funds rate within the central bank’s target range.
- The European Central Bank took a small step toward ending its balance sheet expansion, but added dovish forward guidance, lowering expectations for rate increases for at least a year.
- The Bank of England (BOE) decided not to raise interest rates as growth has disappointed and inflation remained low.

PROBABILITY OF BOE MAY 2018 RATE INCREASE



SOURCE: Northern Trust Fixed Income; Bloomberg

Long-Term Views

- Interest rates are likely to move only moderately higher given low inflation.
- Accommodative foreign central bank policy and low inflation will constrain the Fed from aggressively increasing rates.
- We forecast a 10-year Treasury of 3% in five years.

ULTRA-SHORT/CASH

Market Overview:

- Yields on one-year Treasury bills moved up 22 basis points in the second quarter as investors bet the Fed would increase interest rates at its June meeting.
- Assets in prime money funds are slowly increasing as investors are attracted by higher yields, stable net asset values and adequate liquidity.
- SIFMA fell sharply after taxable individuals paid taxes in April. While we expect muni rates to return to historical averages against one-month LIBOR, those yields do not look attractive at the current time.

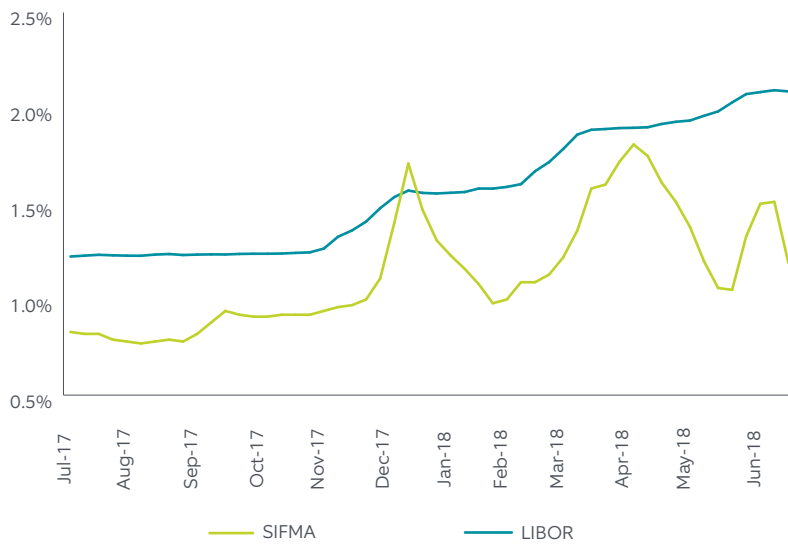
Ultra-Short Performance:

- Contributor - Sector Allocation
- Detractor - Duration

Current Positioning:

Ultra-short strategies remain overweight credit assets and are positioned with a modestly short duration.

SHORT-TERM RATES



SOURCE: Northern Trust Fixed Income; Bloomberg

TREASURYS & TIPS

Market Overview:

- The Treasury 2-year to 10-year spread ended the quarter at 33 basis points, the narrowest since 2007. Bond investors believe the long end of the curve will remain anchored, as shown by the 3-year forward curve.
- The Treasury has been increasing bill issuance and tax reform has led many investors to liquidate holdings. We believe this negative technical backdrop will ease later this year.

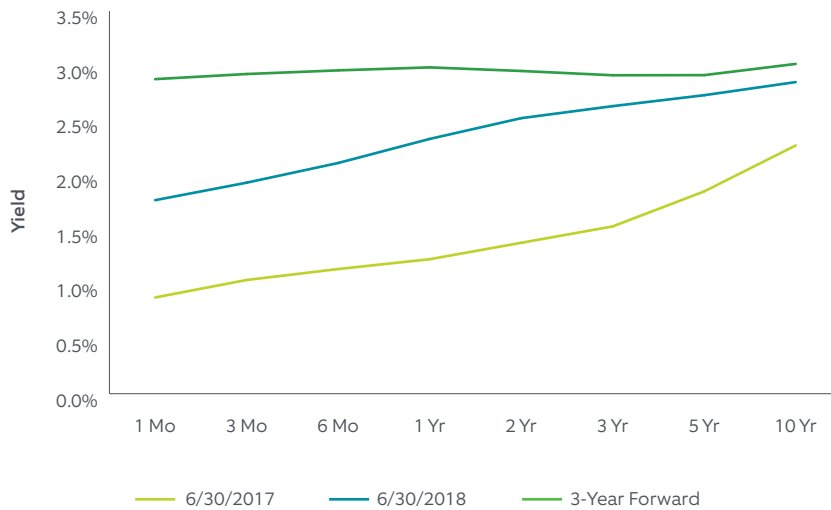
Rates Performance

- Contributor - Duration / Curve Positioning
- Contributor - Asset Allocation (TIPS)

Current Positioning:

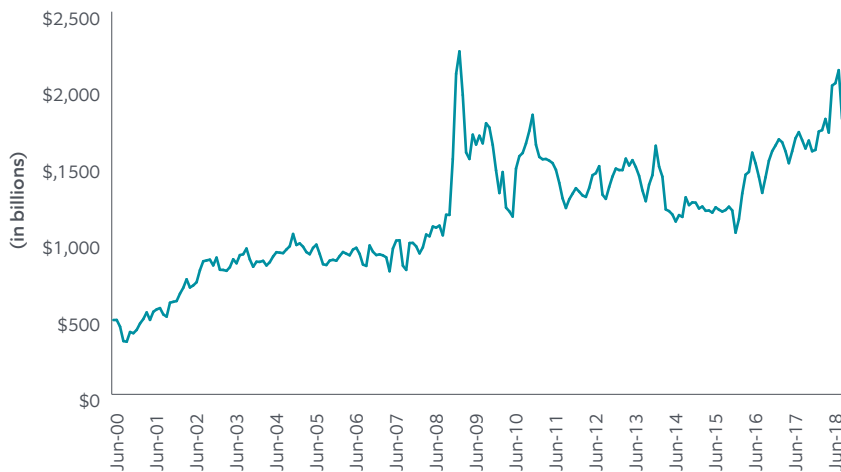
Portfolios remain underweight Treasuries and are neutral on TIPS. We believe AAA-rated mortgage bonds offer an attractive substitute for Treasuries from a relative value and diversification perspective.

YIELD CHANGE BY MATURITY



SOURCE: Northern Trust Fixed Income; U.S. Department of the Treasury

T-BILL ISSUANCE – ROLLING QUARTER



SOURCE: Northern Trust Fixed Income; SIFMA (Securities Industry and Financial Markets Association)

INVESTMENT-GRADE CREDIT

Market Overview:

- Corporate sales, earnings and cash flows have improved and are supportive of valuations.
- Despite a positive fundamental backdrop, investment-grade credit spreads faced pressure as a flurry of merger & acquisition activity, consistent heavy supply and muted demand caused spreads to widen.

U.S. IG CORPORATE OPTION-ADJUSTED SPREAD



SOURCE: Northern Trust Fixed Income; Barclays Live

Credit Performance

- Detractor - Security Selection
- Detractor - Sector Allocation

Current Positioning:

Portfolios remain overweight corporate debt. We expect the weak technical environment to reverse and investment-grade spreads to tighten in the second half of the year.

HIGH-YIELD BOND

Market Overview:

- Revenues for high-yield companies have accelerated, driving higher earnings and cash flows. Positive fundamentals from tax reform support our belief that defaults will continue to fall.
- New issuance is down 30% relative to last year, a positive technical that is supportive of tight credit spreads.

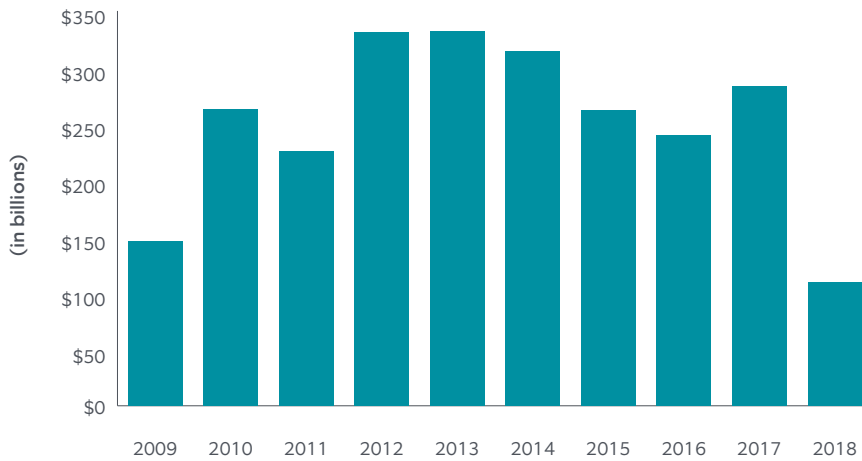
High-Yield Performance

- Contributor - Sector Allocation
- Detractor - Security Selection

Current Positioning:

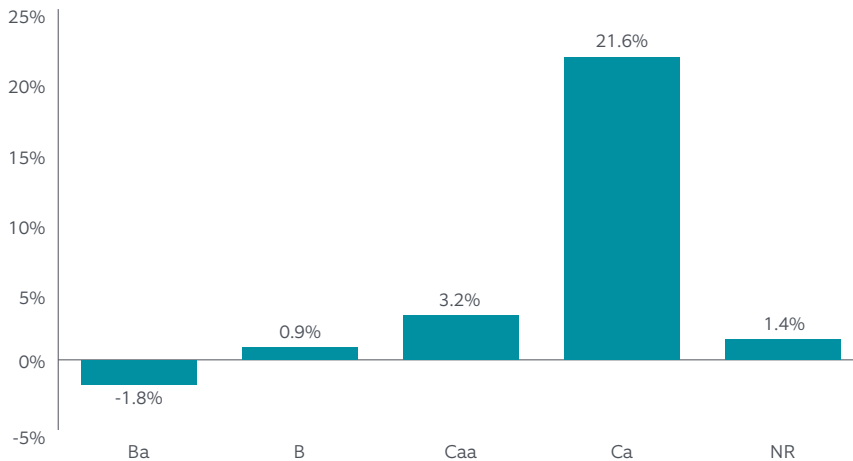
Being overweight lower-quality issuers with higher yields has contributed to performance over the course of this year. Improving issuers' sales, earnings and cash flows support our positioning.

HIGH YIELD ISSUANCE – ANNUAL



SOURCE: Northern Trust Fixed Income; SIFMA (Securities Industry and Financial Markets Association)

TOTAL RETURN BY QUALITY – YTD 2018



SOURCE: Northern Trust Fixed Income; Barclays Live

MUNICIPAL BOND

Market Overview:

- The municipal yield curve is much steeper than the Treasury curve and the market offers better value in longer maturities. Muni/Treasury ratios from 1- to 5-year maturities look particularly expensive.
- New issuance has been very light. We believe new issuance throughout 2018 will be insufficient to meet demand, providing a strong technical assist to the market.

Municipal Performance

- Contributor - Security Selection
- Detractor - Curve Positioning

Current Positioning:

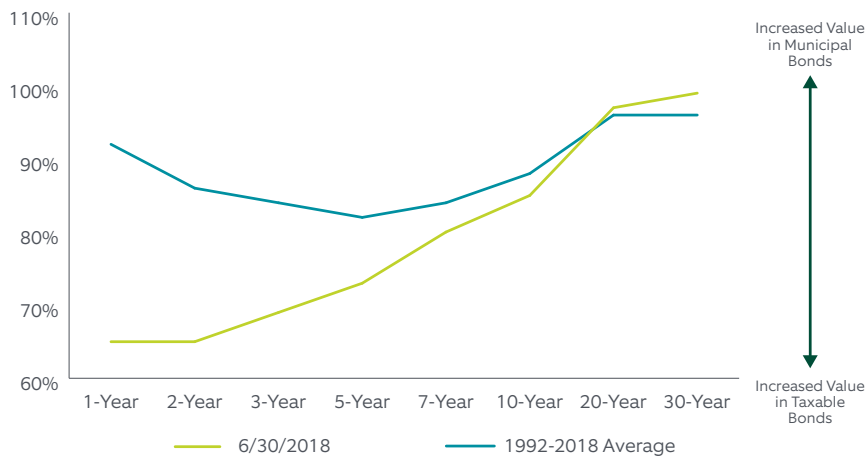
Portfolios' duration is largely neutral to benchmarks. We favor select general obligation bonds and essential services revenue bonds.

TREASURYS VS. AAA MUNICIPALS - YTD 2018



SOURCE: Northern Trust Fixed Income; Bloomberg Barclays

RATIO: AAA MUNI YIELD TO TREASURY YIELD



SOURCE: Northern Trust Fixed Income

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